

WHAT IS CLAIMED IS:

1. A liquid crystal display, comprising:

a liquid crystal cell including a pair of transparent substrates with orientation layers deposited on inner surfaces thereof, and a liquid crystal layer of liquid crystal material injected between the substrates;

biaxial compensation film provided on outer surfaces of said liquid crystal cell, said biaxial compensation films including an optical dielectric material layer ;and

polarization plates provided on outer surfaces of said biaxial compensation films,

wherein retardation values $(n_y - n_x) \cdot d$ and $(n_z - n_x) \cdot d$ of the biaxial compensation films are respectively within ranges of $-30 \pm 5 \text{ nm}$ and $-R_{LC}/4 \pm 15 \text{ nm}$,

where “d” is set as a cell gap of the liquid crystal cell, “ R_{LC} ” is set as a phase retardation value of the liquid crystal layer, an axis perpendicular to planes made by the substrates is set as a z-axis, x-axis and y-axis are formed on a planar surface of the substrates, and refractive indices of molecules comprising the biaxial compensation films in the x, y and z directions are denoted by n_x , n_y and n_z .

2. The liquid crystal display of claim 1, wherein liquid crystal molecules of the liquid crystal layer have a symmetrically bent alignment about an imaginary axis parallel and equidistant to the pair of transparent substrates.

3. The liquid crystal display of claim 1, wherein the material layer of the biaxial compensation films is an optical dielectric material having a negative anisotropy.

4. The liquid crystal display of claim 1, further comprising hybrid C plate compensation films provided between the liquid crystal cell and the biaxial compensation films.

5. A liquid crystal display, comprising:

5 a liquid crystal cell including a pair of transparent substrates with orientation layers deposited on inner surfaces thereof, and a liquid crystal layer of liquid crystal material injected between the substrates;

biaxial compensation films provided on at least one outer surface of the liquid crystal cell, the biaxial compensation films including an optical dielectric material layer;

10 and

polarization plates provided on outer surfaces of the biaxial compensation films, wherein retardation values $(n_y - n_x) \cdot d$ and $(n_z - n_x) \cdot d$ of the biaxial compensation films are respectively within ranges of $-60 \pm 10 \text{ nm}$ and $-R_{LC}/2 \pm 30 \text{ nm}$,

15 where “d” is set as a cell gap of the liquid crystal cell, “ R_{LC} ” is set as a phase retardation value of the liquid crystal layer, an axis perpendicular to planes made by the substrates is set as a z-axis, x- and y-axes are formed on a planar surface of the substrates, and refractive indexes of molecules comprising the biaxial compensation films in the x, y and z directions are denoted by n_x , n_y and n_z .

20 6. The liquid crystal display of claim 5, wherein liquid crystal molecules of the liquid crystal layer have a symmetrically bent alignment about an imaginary axis parallel and equidistant to the pair of substrates.

7. The liquid crystal display of claim 5, wherein the material layer of the biaxial compensation films is an optical dielectric material having a negative anisotropy.

8. The liquid crystal display of claim 5, further comprising hybrid C plate compensation films provided between the liquid crystal cell and the biaxial compensation films.